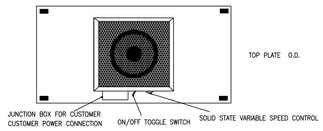
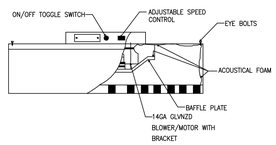
PUREFLO-FPM





KEY NOTES:

Mount the standard Pureflo-FPM fan or equivalent and housing into the tee-bar ceiling and adjust or level the unit so there is minimum gap. Use caulking or gasket material at the peripheral surface where the filter housing and the mounting surface meet to eliminate all leakage paths. The unit may also be mounted suspended below the ceiling using the eyebolts.

Bring the correct power supply to the Pureflo-FPM junction box. (115 vac, 60 Hz; 5 amp (1/3 HP motor) branch circuit per unit. Adhere to general specifications for wiring. Before making any connections, make sure the power on/off toggle switch is in the off position.

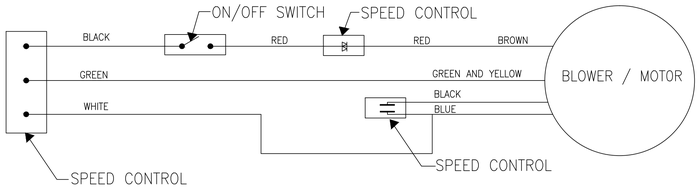
Check the knife-edges on the filter housing mounted in the ceiling to make sure the edges are straight and contamination free. Remove the six acorn nuts and nylon washers from the filter housing. Using two people on opposite ends of the filter, raise the filter into place, passing the studs on the filter housing through the holes in the gel seal filter frame. Once in the filter is in position, place the nylon sealing washers onto the studs first, then start the acorn nuts at all six locations. Tighten with a ratchet wrench until snug in place.

Check the knife-edges on the filter housing CAUTION: DO NOT OVER-TIGHTEN. THE FILTER SEAL IS PROVIDED BY THE KNIFE EDGE IN THE GEL, AND DOES NOT DEPEND ON CLAMPING FORCE.

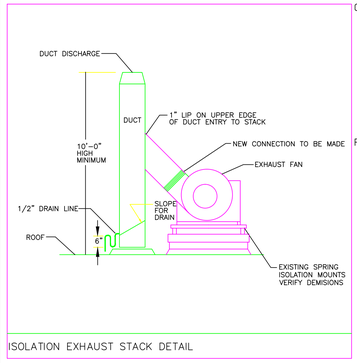
Turn on the unit and set the airflow by turning the speed control switch clockwise from .”high.” until the desired airflow is achieved. The recommended level is 90-fpm +/- 20%.

After time in service, when the airflow drops from the recommended 90 fpm +/- 20%, adjust the speed control higher to achieve the recommended airflow. If the flow cannot be obtained when the speed control has been set fully counter-clockwise to .”high.” (just before the speed control .”off.” position), it will be necessary to change filters.

GENERAL ELECTRICAL DIAGRAM



Refer to Manufactures recommendation for electrical connection and project specifications.
Also refer to electrical drawing of existing condition as a reference due to some conditions may vary and contractor needs to verify existing condition before installation of mechanical items.



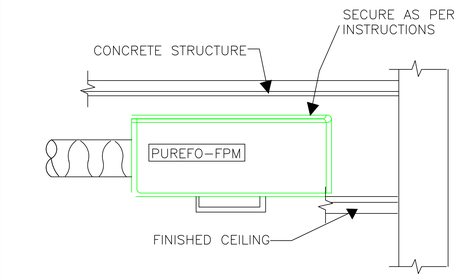
ISOLATION EXHAUST STACK DETAIL

GENERAL
A. Base fan performance at standard conditions (density 0.075 Lb/ft3).
A. Fans selected shall be capable of accommodating static pressure and flow variations of +/-15% of scheduled values.
B. Each fan shall be belt drive in AMCA arrangement 1, 3, 9 or 10 according to existing conditions..
C. Fans are to be equipped with lifting lugs.
D. After fabrication all carbon steel components shall be cleaned and chemically treated by a phosphatizing process to insure proper removal of grease, oil, scale, etc. Fan shall then be coated with a minimum of 2-4 mils of Permatector (Polyester Urethane), electrostatically applied and baked. Finish color shall be industrial gray. Coating must exceed 1,000-hour salt spray under ASTM B117 test method.

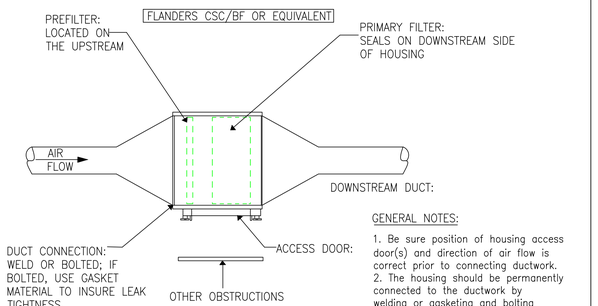
FAN HOUSING AND OUTLET
A. Fan housing is to be aerodynamically designed with high-efficiency inlet, engineered to reduce incoming air turbulence.
B. The housings on all fan sizes shall be of continuously welded heavy gauge steel. All interior and exterior surface steel shall be coated with a minimum of 2-4 mils of Permatector (Polyester Urethane), electrostatically applied and baked. Finish color shall be gray. No uncoated metal fan parts will be allowed.
C. Housing and bearing support shall be constructed of welded structural steel members to prevent vibration and rigidly support the shaft and bearings.
D. An OSHA compliant belt guard shall be included to completely cover the motor pulley and belt(s).

FAN WHEEL
A. The fan wheel shall be of the non-overloading single width backward inclined centrifugal type. Wheels shall be statically and dynamically balanced to balance grade G6.3 per ANSI S2.19.
B. Fan wheel shall be manufactured with continuously welded steel blades and coated with a minimum of 2-4 mils of Permatector (Polyester Urethane), electrostatically applied and baked. Finish color shall be industrial gray.
C. The wheel and fan inlet shall be carefully matched and shall have precise running tolerances for maximum performance and operating efficiency.

FAN MOTORS AND DRIVE.
A. Motors shall meet or exceed EPACT (Energy Policy ACT) efficiencies. Motors to be NEMA T-frame, 1800 or 3600 RPM, Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC) with a 1.15 service factor.
B. Drive belts and sheaves shall be sized For 150% of the fan operating brake horsepower, and shall be readily and easily accessible for service, if required.
C. Fan shaft to be turned and polished steel that is sized so the first critical speed is at least 25% over the maximum operating speed for each pressure class.
D. Fan shaft bearings shall be Air Handling Quality, bearings shall be heavy-duty grease lubricated, self-aligning or roller pillow block type.
E. Air Handling Quality bearings to be designed with low swivel torque to allow the outer race of the bearing to pivot or swivel within the cast pillow block. Bearings shall be 100% tested for noise and vibration by the manufacturer. Bearings shall be 100% tested to insure the inner race diameter is within tolerance to prevent vibration.
F. Bearings shall be selected for a basic rating fatigue life (L-10) of 80,000 hours at maximum operating speed for each pressure class (Average Life or (L-50) of 400,000 hours).
G. Bearings shall be fixed to the fan shaft using concentric mounting locking collars, which reduce vibration, increase service life, and improve serviceability. Bearings that use set screws shall not be allowed.
H. Bearings shall have Zerk fittings to allow for lubrication.



1 M-102 PLAN VIEW



3 M-102 PLAN VIEW

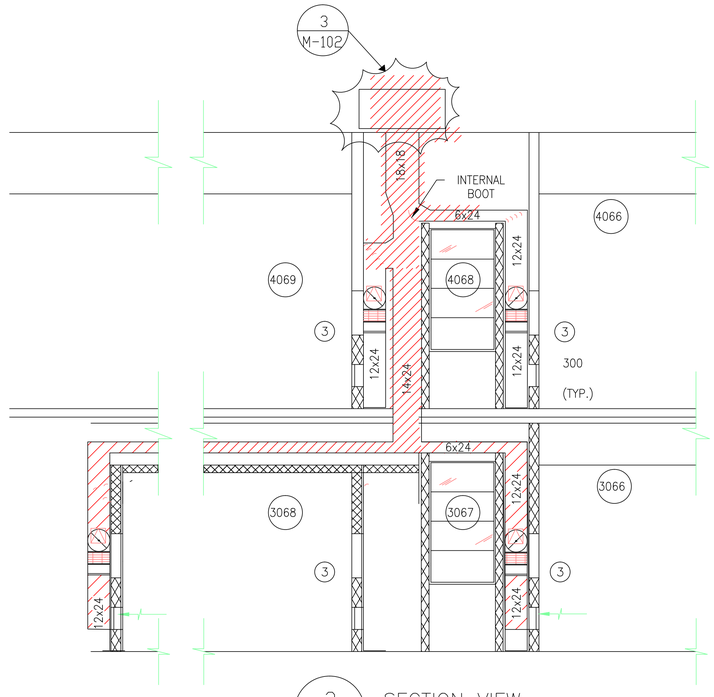
GENERAL NOTES:
1. Be sure position of housing access door(s) and direction of air flow is correct prior to connecting ductwork.
2. The housing should be permanently connected to the ductwork by welding or gasketing and bolting before installation of the filters
3. Provide Magnahelics across filters
4. Refer to Manufactures recommendations for installation

PARTS LIST-PUREFLO-FPM

PART QUANTITY	PART DESCRIPTION	FFI PART NO.
4	EYE BOLT 1/4-20 UNC-2A X 2-3/8"	01927803
1	INLET COVER SCREEN	09158779
1	PRE-FILTER FOAM PAD 19-1/2" X 19-1/2" X 1/4"	09965042
1	BLOWER/MOTOR 240W, 115V AC	02307001
1	CAPACITOR 20uf	02307043
1	MOTOR BRACKET 14ga GALVANIZED	09158757
1	SPEED CONTROL KBWC-16 w/KNOB AND DECAL	02307059
1	ON/OFF TOGGLE SWITCH	02307046
1	BAFFLE PLATE ASSEMBLY AL	09156799

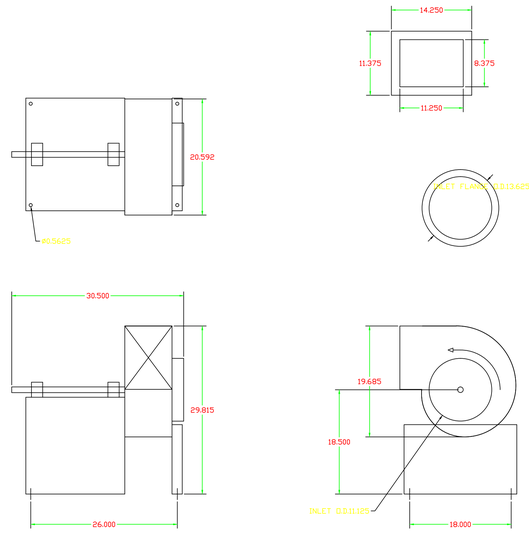
FAN SCHEDULE

FAN NO.	SERVICES	LOCATION	CFM	FAN RPM	STATIC PRESS. IN W.G.	MAX TIP SPEED	MINIMUM WHEEL DIA.	FAN WHEEL TYPE	MOTOR HP/VOLT/PHASE	DRIVE TYPE	FAN TYPE	CONTROL SWITCH & INTERLOCK TYPE	MFG. & MODEL # DESIGN BASED ON GREENHECK OR APPROVED EQUAL	STARTER	DISC. SW.
BISW-21	ISOLATION ROOM 3064	ROOF	400	1,800	3.75	N/A	N/A	BACKWARD INCLINED	1/208/3#	BELT	UTILITY SET	CONTINUOUS OPERATION	GREENHECK 7-BISW 21	BY CONTRACTOR	BY CONTRACTOR
BISW-21	ISOLATION ROOM 3068	ROOF	400	1,800	3.75	N/A	N/A	BACKWARD INCLINED	1/208/3#	BELT	UTILITY SET	CONTINUOUS OPERATION	GREENHECK 7-BISW 21	BY CONTRACTOR	BY CONTRACTOR



2 M-102 SECTION VIEW

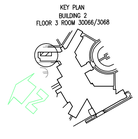
GREENHECK MODEL 7-BISW 21



4 M-102 PLAN VIEW

Revision	Date

KEY PLAN
BUILDING 2
FLOOR 3 ROOM 3066/3068



RECOMMEND APPROVAL

REQUESTER	Date		
CHIEF OF SERVICE	Date	CHIEF OF STAFF	Date
ASSOC. DIR. PATIENT CARE SVC.	Date	ASSOC. DIR. for OPERATIONS	Date
APPROVAL BY: MEDICAL CENTER DIRECTOR			Date

Drawing Title: SECTIONS DETAILS

Approved: Safety Manager/M&O Supervisor

Approved:Chief of Facilities Management Svr.

Project Title: ISOLATION & BARIATRIC RENAVATION Blg. 2 Fl 3

Building Number: BUILDING # | Checked | Drawn: GLM

Location: W.G.(Bill) Hefner Medical Center, 1601 Brenner Ave., Salisbury NC 28144

Date: 14 OCT 2011

Project No.: 659-12-001

DRAWING NO. M-102

DWG. 8 OF 11

Department of Veterans Affairs